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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 09/955,691
Filing Date: September 19, 2001
Appellant(s): David Harkness; Daozheng Lu; William Feininger; Craig Smithpeters

James A. Flight
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 3/16/2006 appealing from the Office action mailed 8/11/2005.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings, which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

The following is a listing of the evidence (e.g., patents, publications, Official Notice, and admitted prior art) relied upon in the rejection of claims under appeal.

Thomas et al. (U.S. Patent No. 5,481,294)

Lert, Jr. et al. (U.S. Patent No. 4,677,466)

Lu et al. (U.S. Patent No. 5,594,934)

Killian (U.S. Patent No. 6,163,316)

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 4-6, 24, 29 and 31-33 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Thomas et al. (U.S. Patent No. 5,481,294).

Referring to claim 1, Thomas discloses a tuner to tune to the program (see

element 70 in Figure 2C).

Thomas also discloses a meter coupled to the tuner to record a media link embedded in the program tuned by the tuner (see the reference code reader 86 in Figure 2C and Column 13, Lines 30-34 for the code 86 reading the same ancillary code as the household code reader 60 and Column 11, Lines 40-49 for the ancillary code identifying the program and/or station, thereby providing an embedded media link).

Thomas also discloses a program identifier to identify the program tuned by the tuner based on the media link recorded by the meter (see Column 11, Lines 40-42 for the ancillary code (media link) identifies both the program and station, therefore containing a program identifier to identify the program based on the ancillary code recorded by the code reader 86 (or household code reader 60) in Figure 2C).

Referring to claim 4, Thomas discloses that the program identifier is arranged to identify the program directly from the media link (see Column 11, Lines 40-42 for the media link identifying a program).

Referring to claim 5, Thomas discloses that the program identifier is arranged to identify the program by accessing a content provider (see Column 11, Lines 40-42 for also identifying the station from the ancillary code, therefore a program can also be identified by accessing the station id/content provider).

Referring to claim 6, see rejection of claim 4 and note that the ancillary code provides information to identify the program, therefore when code reader 86 reads the code, the ancillary code provides a manual identification of the program.

Referring to claim 24, Thomas discloses a tuner tunable to at least one of a plurality of channels and a meter coupled to the tuner (see rejection of claim 1).

Thomas also discloses that the meter is arranged to detect a media link embedded in a program carried in a channel tuned by the tuner (see the rejection of claim 1) and to extract a broadcast signature from the program (see Column 12, Lines 45-46 and Figure 2C for a reference signature extractor 62).

Thomas also discloses a comparator arranged to generate a subset of reference signatures from a library of reference signatures based upon the media link (see Column 17, Lines 15-20 for detecting the media link (ancillary code of tuned program) in a program and comparing the media link to reference signatures in library 88 and Column 17, Lines 27-28 for storing the appropriate reference record according to the comparison results and also note Figure 6 for the stored reference records containing reference signatures, thereby creating a subset of reference signatures), and to compare the broadcast signature extracted by the meter to the subset of reference signatures (see Column 18, Lines 34-28 for comparing the tuning records 120 in Figure 4 that contain no ancillary codes (only broadcast signatures) to the subset of reference signatures (reference record 154)).

Referring to claim 29, see rejection of claim 24 and note that Thomas also teaches that ancillary codes can be extracted from one or more vertical blanking intervals in the program video, thereby teaching the closed captioning portion of a video signal, and therefore ancillary codes are inherently closed captioning information.

Referring to claim 31, Thomas discloses that the reference signature includes an

identification of the program (see Column 12, Lines 57-58).

Referring to claim 32, Thomas discloses that the broadcast signature includes a channel and time at which the broadcast signature is extracted (see Column 12, Lines 51-55).

Referring to claim 33, see rejection of claim 31.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 7-10, 13-23, 26-28 and 48-50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thomas et al. (U.S. Patent No. 5,481,294) in view of Killian (U.S. Patent No. 6,163,316).

Referring to claims 7-8, Thomas discloses all of the limitations in claim 1, but fails to teach that the media link is a URL (website) or a code referenced to a URL (hyperlink used to access the website). Killian discloses extracting a URL/code referenced to a URL in the VBI of a television signal (see Column 5, Lines 14-29 and Lines 39-42).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the program information transmitted in and extracted from the VBI, as taught by Thomas, using the URL data transmitted in the VBI, as taught by Killian, for the purpose of integrating television signals and Internet

information (see Column 5, Lines 44-45 of Killian).

Referring to claim 9, see rejection of claims 7-8 and note that the URL data sent in the VBI can be "triggered" to receive a web page, therefore a URL is a trigger used to retrieve a web page over the Internet (see Column 5, Lines 19-21 of Killian).

Referring to claim 10, Thomas discloses a tuner to tune to the program (see element 70 in Figure 2C).

Thomas also discloses that the meter captures first and second program identifying data identifying the program tuned by the tuner (see the reference code reader 86 in Figure 2C and Column 13, Lines 30-34 for the code 86 reading the same ancillary code as the household code reader 60 and Column 11, Lines 40-49 for the ancillary code identifying the program and/or station, thereby providing an embedded media link and see Column 12, Lines 45-46 and Figure 2C for a reference signature extractor 62), wherein the first program identifying datum is a media link (see Column 11, Lines 40-49) and the second program identifying datum is data other than a media link (see Column 12, Lines 47-48 for extracting reference signatures).

Thomas fails to disclose that when the media link is activated, a request for information is made from a content provider via a network. Killian teaches receiving a URL via VBI television signal (see Column 5, Lines 39-42) and using this URL to receive a web page via the Internet (see Column 5, Lines 14-29).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the program information transmitted in and extracted

fro the VBI, as taught by Killian, for the purpose of integrating television signals and Internet information (see Column 5, Lines 44-45 of Killian).

Claim 13 corresponds to claim 10, with the additional limitation of a program identifier arranged to identify the program from the first or second identifying data (see Column 11, Lines 40-42 for the media link identifying a program).

Claim 14 corresponds to claim 13, with the additional limitation of the program identifier identifies the program by comparing the first or second program identifying data to the first or second reference identifying data (see Column 17, Lines 15-29).

Claim 15 corresponds to claim 10, where Thomas discloses that the second program identifying datum is a signature extracted from the program (see Column 12, Lines 45-51).

Claim 16 corresponds to claim 10, where Thomas teaches the additional limitation of keeping the second program-identifying datum only if the meter fails to acquire the first program-identifying datum (see Column 18, Lines 34-38).

Claim 17 corresponds to claim 10, where Thomas teaches that the program identifier is arranged to identify the program directly from the media link (see Column 17, Lines 15-29).

Claim 18 corresponds to claim 10, where Thomas teaches the program identifier being arranged to identify the program (see the rejection of claim 13) and Killian teaches activating the media link to initiate the request for information from the content provider (see again the rejection of claim 10).

Claim 19 corresponds to claim 10, where Thomas teaches that the program

identifier is arranged to receive a manual identification of the program (see rejection of claim 13 and note that the ancillary code provides information to identify the program, therefore when code reader 86 reads the code, the ancillary code provides a manual identification of the program.).

Referring to claims 20-21, see rejection of claims 7-8, respectively.

Referring to claim 22, see rejection of claim 9.

Referring to claim 23, see rejection of claim 16.

Referring to claims 26-28, see rejection of claims 7-9, respectively.

Referring to claims 48-50, see rejection of claim 7.

Claims 2-3 and 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thomas et al. (U.S. Patent No. 5,481,294) in view of Lu et al. (5,594,934).

Referring to claims 2-3, Thomas teaches all of the limitations in claim 1 and a meter that is arranged to detect media links from programs carried in the tuned channels, but fails to teach a scanning tuner for tuning to a plurality of channels. Thomas only teaches multiple tuners (element 70 in Figure 2C).

Lu teaches a scanning tuner used to cycle through all channels that are available for tuning (see Column 6, Lines 23-26).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the local metering site (element 34 in Figure 2A) that contains multiple tuners, as taught by Thomas, to include the scanning tuner, as taught by Lu, for the purpose of reducing the amount of tuner components in the system by

only utilizing a single scanning tuner, reducing the cost of the system.

Referring to claims 11-12, see rejection of claims 2-3, respectively.

Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over Thomas et al. (U.S. Patent No. 5,481,294 in view of Lert, Jr. et al. (U.S. Patent No. 4,677,466).

Referring to claim 30, Thomas discloses all the limitations in claims 22, but fails to teach comparing the broadcast signature to a reference signature selected from a library of reference signatures based upon a hash code.

Lert, Jr. teaches using a hash code to search through a database of about 40,000 reference signatures (see Column 9, Lines 58-65).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the comparator, as taught by Thomas, using the comparison technique, as taught by Lert, Jr, for the purpose of identifying repetitively broadcast programs and the time of occurrence of the broadcast and the duration of broadcast (see Column 2, Lines 10-14 of Lert, Jr.).

(10) Response to Argument

Ground 1: <u>The Examiner's Contention That An "Ancillary Code" Is A "Media Link" Is In Error.</u>

Applicant argues that the examiner has taken an overbroad interpretation of the claim limitation "media link". The examiner disagrees and notes that the Applicant specification clearly states, "*media links include URLs embedded in video and/or audio, surrogate URLs, **or any other links in video and/or audio that link a content recipient to content provided by a content provider (such as a Web Site) or to content provided elsewhere in the video and/or audio whether such content is stored in cache or not***".

The examiner notes that this definition (in bold) of a media link clearly read on the broadcast signature of Thomas.

Specifically, regarding the recitation, "***or any other links in video and/or audio that link a content recipient to content provided by a content provider***", note Column 11, Lines 40-42 and Lines 50-54 for the ancillary code (being interpreted as the "media link" by the examiner) uniquely identifies the program and/or station. Therefore, the ancillary code is clearly a link in video that links a content recipient (the viewer) to content (the program transmitted from the television station) provided by a content provider (the station) by the ancillary code containing information (the media link/links) that inform the viewer which station is transmitting the television program.

Applicant asserts that, "*it is quite clear that the **applicants have defined the term "media link" to be any link that links a content recipient to additional content***", however the examiner disagrees that the definition stated above is defined to link a content recipient to additional content. Specifically with reference to the definition, "***or any other links in video and/or audio that link a content recipient to content***

provided by a content provid r", Thomas clearly teaches links in the form of the ancillary codes in the television program (which contains audio and video) that link the viewer/content recipient (who receives the ancillary code) to content (television program received, by the use of the program and/or station identification information) provided by a content provider (the station transmitting the program). This definition only requires a link inside the video to link the viewer to content provided by a provider (and clearly a content provider is capable of providing both a television program and additional information) and there is no recitation in the definition (referenced above by the examiner) for the link to contain information to link to **additional information**.

Therefore, Thomas clearly teaches a media link and all rejections made by the examiner in view of this limitation have not been made "*devoid of any reference to applicants'* specification" and have been made using proper claim construction (in view of Applicant's own definition of "media link" in the Applicant's specification).

Ground 2: The Examiner's Contention That Thomas Anticipates Claim 1 Is In Error.

Regarding the argument that the examiner's contention that Thomas anticipates claim 1 has been made in error, see the rebuttal to Applicant's arguments of Ground 1, which has established that the examiner's interpretation of a media link is proper.

Ground 3: The Examin r's Contention That Thomas Anticipates Claim 5 Is In Error.

Applicant argues that Thomas does not teach identification of a program **by accessing a content provider**. Again, note Column 11, Lines 40-42, which identifies the station id/content provider from the ancillary code. Further note Column 11, Lines 20-24, for identifying this information from the vertical blanking interval of the tuned channel (see Column 14, Lines 55-59 for the ancillary code being extracted from the tuned channel)). Therefore, if the media link (ancillary code) is being identified when a channel is tuned to, then clearly the provider of the television program is being accessed because when a viewer tunes to a television channel, the viewer begins receiving the data necessary to view a television program, which is transmitted by a content provider (the television station), and therefore the content provider (television station) is being accessed.

Ground 4: The Examiner's Contention That Thomas Anticipates Claim 5 Is In Error.

Clearly the user tunes to the channel and the media link is identified, which is consistent with the specification of a manual identification being provided by user input (see Page 30 of specification).

Applicant argues that Thomas fails to teach a manual identification and that the term "manual identification" clearly refers to a non-automated act.

The examiner notes that Applicant's specification teaches a manual identification on Page 30, Lines 4-5 which states, "*the monitoring equipment may be arranged to prompt audience members to manually input a program identification*". Therefore, a manual identification is clearly input made by a user.

Thomas also teaches a manual identification by the user inputting which channel to watch (*manually input a program identification*), therefore allowing the system to determine the media link from the channel selection made by the user.

Therefore, Thomas clearly reads on the manual identification limitation of claims 5.

Ground 5: The Examiner's Contention That Column 17, Lines 15-28 Of Thomas Describes A Comparator To Generate A Subset Of Reference Signatures From A Library Of Reference Signatures Based Upon A Media Link Embedded In A Program As Recited In Claim 24 Is In Error.

Applicant argues that Thomas fails to teach: (1) use of a media link; (2) create a subset of reference signatures from a library of reference signatures; (3) create such a subset of reference signatures from a library of reference signatures; or (4) compare a broadcast signature to a subset of reference signatures created from a library based upon a media link.

The examiner disagrees and notes that at Column 17, Lines 15-17 clearly teaches that a media link (ancillary code) is detected, therefore clearly a media link is being used, which meets argument (1).

In regards to arguments (2) and (3), after the ancillary code is detected (discussed above) the ID extracted from the ancillary code is compared to a library of signatures (code-program library 88), and a subset of signatures are created into a record 152 (see Column 17, Lines 17-29), therefore, Thomas clearly teaches generating a subset of reference signatures (record 152) from a library of reference signatures (library 88) based upon the media link (detected ancillary code).

In regards to argument (4), the Applicant has stated that Thomas fails to teach comparing a broadcast signature to a subset of reference signatures created from a library based upon a media link. The examiner notes that the claim limitations states, "*to compare the broadcast signature extracted by the meter to the subset of reference signatures*". Thomas clearly teaches these limitations at Column 18, Lines 34-38, by comparing the tuning records 120, which contain broadcast signatures (further note Column 16, Lines 9-29) to the subset of reference signatures (the record 154 or 166 stored at Column 17, Lines 27-37).

The examiner is aware that the records contain signatures based on whether an ancillary code is detected or not, however, in both cases, a subset of reference signatures are stored, which is clearly conveyed by Thomas (note Column 17, Lines 27-57 for how signatures are extracted from programs whether a media link is detected or not). Therefore, when the comparison is made at Column 18, Lines 34-38, the tuning

records 120 (extracted signatures) are compared to the subset of reference signatures (record 154 or 166).

Therefore, Thomas clearly discloses all of the limitations of claim 24.

Ground 6: The Examiner's Contention That Thomas Anticipates Claim 29 Is In Error.

Applicant argues that Thomas does not teach (1) using closed captioning information to select a reference signature from a library, or (2) comparing a broadcast signature of a broadcast program associated with the closed captioning information to the selected reference signature.

In regards to arguments (1) and (2), instead of reciting a "media link", Applicant has stated that "closed captioning information" is detected and used. The examiner notes that Thomas clearly teaches that the media link extracted, is extracted from the closed captioning area of a television signal, commonly called the vertical blanking interval (see Column 11, Lines 20-24 for extracting ancillary codes from the vertical blanking interval of a broadcast television signal), therefore Thomas clearly teaches that the media link (extracted from the VBI of a TV signal) is closed captioning information, because the ancillary code/media link is transmitted in the closed captioning area of the television signal and any information that is carried in the closed captioning area of a TV signal, is inherently closed captioning information.

Ground 7: It Is Not Obvious To Use A Media Link For Program Identification.

Applicant argues that, *"embedded program identification codes (i.e. ancillary codes) uniquely identifying the program in which they are embedded precisely for the purpose of identifying those programs when received by monitored receiving equipment does not make it obvious that media links to content other than the broadcast programs in which they are carried can be used to identify the program within which they are embedded*".

The examiner has already established that the ancillary codes taught by Thomas are equivalent to "media links", as taught by Applicant's own specification (see examiner's rebuttal above). However, as stated in the examiner's Office Action, Thomas does not teach that the information included in the media link (program ID and station ID as taught by Thomas) includes URL identification data.

Killian teaches that URL identification data can be carried in the VBI of a television signal and extracted. Since Thomas discloses a media link transmitted in the VBI of a TV signal, which contains various types of information that is used by the meter and program identifier (recording and comparing) steps of the independent claims, then clearly it would be obvious to include URL information in the ancillary code for the purpose stated in the examiner's rejection.

A. Claims 7, 20, 26 and 48-50 Are Patentable

The examiner has already established that the ancillary codes taught by Thomas are equivalent to "media links", as taught by Applicant's own specification (see examiner's rebuttal above). However, as stated in the examiner's Office Action, Thomas does not teach that the information included in the media link (program ID and station ID as taught by Thomas) includes URL identification data.

Killian teaches that URL identification data can be carried in the VBI of a television signal and extracted. Since Thomas discloses a media link transmitted in the VBI of a TV signal, which contains various types of information that is used by the meter and program identifier (recording and comparing) steps of the independent claims, then clearly it would be obvious to include URL information in the ancillary code for the purpose stated in the examiner's rejection.

B. Claims 8, 21 and 27 Are Patentable

The examiner has already established that the ancillary codes taught by Thomas are equivalent to "media links", as taught by Applicant's own specification (see examiner's rebuttal above). However, as stated in the examiner's Office Action, Thomas does not teach that the information included in the media link (program ID and station ID as taught by Thomas) includes URL identification data.

Killian teaches that URL identification data can be carried in the VBI of a television signal and extracted. Since Thomas discloses a media link transmitted in the

VBI of a TV signal, which contains various types of information that is used by the meter and program identifier (recording and comparing) steps of the independent claims, then clearly it would be obvious to include URL information in the ancillary code for the purpose stated in the examiner's rejection.

C. Claim 10 Is Patentable

The examiner has already established that the ancillary codes taught by Thomas are equivalent to "media links", as taught by Applicant's own specification (see examiner's rebuttal above). However, as stated in the examiner's Office Action, Thomas does not teach that the information included in the media link (program ID and station ID as taught by Thomas) includes URL identification data.

Killian teaches that URL identification data can be carried in the VBI of a television signal and extracted. Since Thomas discloses a media link transmitted in the VBI of a TV signal, which contains various types of information that is used by the meter and program identifier (recording and comparing) steps of the independent claims, then clearly it would be obvious to include URL information in the ancillary code for the purpose stated in the examiner's rejection.

Further note that by teaching that a URL (which is used to access a content provider) can be included in the ancillary code of Thomas, that the combination of Thomas and Killian clearly teach that when a media link is accessed (which contains the URL) a content provider can receive a request for information via a network.

Ground 8: **Claim 18 Is Not Rendered Obvious By Thomas In View Of Killian**

For the arguments regarding claim 18, see the examiner's rebuttal of **Ground 7** above.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Jason Salce

May 24, 2006

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